



Paddlers enjoy the waters of Salem Harbor at the "Swim & Fin Race for Salem Sound."

# COMMUNITIES WITHIN OUR SALEM SOUND REGION

Beverly

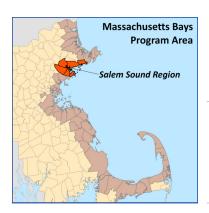
**Danvers** 

Manchester

Marblehead

Peabody

Salem



## **Estuaries: Where Rivers Meet the Sea**

A unique environment with many values, an estuary is a place where fresh water from rivers flows into the salt water of the sea. Estuaries offer protection from storm surge and flooding events, play a large role in improving water quality by removing pollutants and excess nutrients, and harbor countless species, many of which are commercially valuable. They also support a host of recreational uses such as boating, swimming, fishing, shellfishing, birding, and beach-going.

Despite these considerable values, estuaries are threatened in many ways, most of which are connected to human actions. Pressure from hundreds of years of an expanding population and associated development is taking a toll on the health of estuaries and their ability to maintain their ecological integrity.

## The Massachusetts Bays Program and Salem Sound

In 1987, an act of Congress established the National Estuary Program (NEP) under the Clean Water Act to address problems facing these valuable coastal resources. The Massachusetts Bays Program (MBP) became a part of the NEP in 1990, highlighting the region as an "estuary of national significance." Stretching from the New Hampshire border to the tip of Cape Cod, the 50 coastal communities in the region are home to over 1.7 million people. The MBP's mission is to protect and enhance the coastal health and heritage of Massachusetts and Cape Cod Bays.

The MBP's priorities are to:

- 1. Protect and enhance coastal habitat
- 2. Reduce and prevent stormwater pollution
- 3. Protect and enhance shellfish resources
- 4. Manage local land use and growth
- 5. Manage municipal wastewater
- 6. Manage marine invasive species
- 7. Monitor marine waters
- 8. Adapt for projected impacts of climate change



Volunteer citizen scientists receive training at the Beverly Marina on marine invasive species monitoring.

Because of its large size and geographic diversity, the MBP area is divided into sub-regions that are served by regional coordinators working to address coastal planning needs at the local level. The Salem Sound region is served by Salem Sound Coastwatch, a nonprofit organization committed to improving and protecting the coastal resources of Salem Sound and its associated watersheds.

### MBP Salem Sound Coordinator

Website: www.salemsound.org

Barbara Warren, Executive Director Salem Sound Coastwatch 201 Washington Street, Suite 9, Salem, MA 01970 Email: info@salemsound.org Phone: (978) 741-7900







hoto: SSCW

## **Highlights - Salem Sound Region**

As regional MBP coordinator, Salem Sound Coastwatch (SSCW) works with a wide range of partners and interests. Accomplishments include:

- Clean Beaches & Streams Program - An effort is underway to test and report on water quality at 27 outfalls and streams in order to remediate major sources of bacteria flowing into the Salem Sound watershed.
- Riverfront Parks Technical assistance was provided and community support generated for



Volunteers remove trash from an area adjacent to the North River in Peabody.

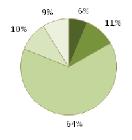
the creation and renovation of three urban river parks in Salem and Peabody. These projects are now funded by Massachusetts Parkland Acquisitions and Renovations for Communities grants.

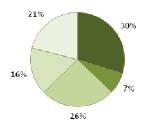
- ♦ Salt Marsh Monitoring Volunteers, including local college students, are involved in ongoing salt marsh monitoring to provide significant data on the pre- and post-restoration condition at six salt marshes: Thissell Marsh (Beverly), Newman Road (Newbury), Forest River/Pickman Park (Salem), Eastern Point (Gloucester), Conomo Point (Essex), and Little Neck (Ipswich).
- Marine Invasive Species SSCW launched a nationally recognized Marine Introduced Species Coastal Monitoring Program, through which citizen volunteers identify and quantify marine invasive species in rocky tidepools and along floating docks. Special species identification cards were developed for this program, as well as a resource-rich website and a monitoring manual, all of which are available to the public.
- ♦ Habitat Restoration A benthic survey of clams was initiated to obtain baseline data on soft shell clam recovery at a reclaimed tidal mudflat at Gloucester's Mill Pond.
- ♦ No Discharge Area A working group of local stakeholders, including Harbormasters, was convened, which resulted in Salem Sound's designation as a No Discharge Area for boat waste.
- ♦ Greenscapes As part of the Greenscapes North Shore Coalition, water conservation and pollution prevention are being promoted to homeowners by bringing this environmentally-friendly landscaping and lawn care initiative to 22 communities on the North Shore.
- Citizen Involvement Through volunteer programs, citizens are engaged in such activities as monitoring, coastal cleanups and removing invasive plants. Additionally, SSCW reaches out to citizens to raise awareness about watershed issues such as the importance of eelgrass beds, the problem of ocean acidification, and projected impacts of climate change.
- Technical Assistance to Municipalities Workshops and other resources are developed and shared with local officials on issues related to water quality, conservation, financing stormwater management, and implementation of National Pollutant Discharge and Elimination System Phase II stormwater regulations.

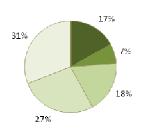
#### **KEY COLLABORATORS**

- Eight Towns & the Bay Committee
- Endicott College
- Environmental Protection Agency
- Essex National Heritage Commission
- Friends of Peabody Lakes and Ponds
- Friends of Salem Woods
- Great Marsh Restoration Team
- Gulf of Maine Council on the Marine Environment
- Ipswich River Watershed Association
- Living Lawn
- Manchester Coastal Stream Team
- Manchester-Essex Conservation Trust
- Marblehead Conservancy
- Massachusetts Audubon Society
- Massachusetts Corporate Wetlands Restoration Partnership
- Massachusetts Department of Environmental Protection
- Massachusetts Division of Ecological Restoration
- Massachusetts Division of Marine Fisheries
- Massachusetts Institute of Technology Sea Grant Program
- Massachusetts Office of Coastal Zone Management
- Massachusetts Urban and Community Forestry Program
- MA / NH / ME Invasives Working Group
- Municipal Harbormasters
- National Oceanic and Atmospheric Administration, National Marine Fisheries Service
- Safer Waters for Massachusetts
- Salem Academy Charter School and area schools
- Salem Alliance for the Environment
- Salem State College
- Tufts University, Department of Urban and Environmental Policy and Planning
- U.S. Fish & Wildlife Service, Parker River National Wildlife Refuge
- U.S. National Park Service, Salem National Historic Site

## **Massachusetts Bays Program Regional Characteristics**









Human Population Shoreline Length

Land Area